

#### DEPARTMENT OF THE INTERIOR

#### **Bureau of Reclamation**

[RR03040000.22XR068080.RX.18786000.5004001]

Request for Input on Development of Post-2026 Colorado River Reservoir

Operational Strategies for Lake Powell and Lake Mead Under Historically Low

Reservoir Conditions

**AGENCY:** Bureau of Reclamation, Interior.

**ACTION:** Notice and request for input.

SUMMARY: The Secretary of the Interior has directed the Bureau of Reclamation (Reclamation) to begin work to develop operating strategies for the continued coordinated operation of Lake Powell and Lake Mead. A number of reservoir and water management decisional documents and agreements that govern operation of Colorado River facilities and management of Colorado River water are currently scheduled to expire at the end of 2026. These include the December 2007 Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead (2007 Interim Guidelines), among other important management documents, both within the United States, as well as international agreements between the United States and Mexico pursuant to the United States-Mexico Treaty on Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande (1944 Water Treaty).

**DATES:** Submit written comments on the proposed development of Post-2026 Colorado River Operational Strategies pursuant to this notice on or before September 1, 2022.

Reclamation will host two public webinars to summarize the content and purpose of this Federal Register notice. The webinars will take place on Tuesday, July 12, 2022, from 10 a.m. to 11 a.m. (MDT), and on Thursday, July 14, 2022, from 10 a.m. to 11 a.m. (MDT).

**ADDRESSES:** Send written comments on the proposed development of Post-2026 Colorado River Operational Strategies to *CRB-info@usbr.gov*.

The virtual meeting held on Tuesday, July 12, 2022, may be accessed at <a href="https://teams.microsoft.com/l/meetup-join/19%3ameeting\_YTg1ZmVmMDItNzkxMC00YjM2LTg3NmEtNmIwMWI3ZGEyNjJm">https://teams.microsoft.com/l/meetup-join/19%3ameeting\_YTg1ZmVmMDItNzkxMC00YjM2LTg3NmEtNmIwMWI3ZGEyNjJm</a> %40thread.v2/0?context=%7b%22Tid%22%3a%220693b5ba-4b18-4d7b-9341-f32f400a5494%22%2c%22Oid%22%3a%22388b569b-9117-49f0-b6f1-cd12ff0587b0%22%7d; or call in (audio only) at (719) 733-3211, Phone Conference ID: 100 899 510#.

The virtual meeting held on Thursday, July 14, 2022, may be accessed at https://teams.microsoft.com/l/meetup-join/19%3ameeting\_MWE0YmZhNDItOGQwZC00YmRiLWJiMmItZDM4ZDUwN2JlNzc x%40thread.v2/0?context=%7b%22Tid%22%3a%220693b5ba-4b18-4d7b-9341-f32f400a5494%22%2c%22Oid%22%3a%22e792bef3-e313-4746-82d1-a6064d5ee897%22%7d; or call in (audio only) at (202) 640-1187, Phone Conference ID: 795 497 392#.

FOR FURTHER INFORMATION CONTACT: Carly Jerla, Senior Water Resources Program Manager, Bureau of Reclamation, at (303) 517-1160; or by email at cjerla@usbr.gov. Individuals in the United States who are deaf, deafblind, hard of hearing, or have a speech disability may dial 711 (TTY, TDD, or TeleBraille) to access telecommunications relay services. Individuals outside the United States should use the relay services offered within their country to make international calls to the point-of-contact in the United States.

**SUPPLEMENTARY INFORMATION:** Through this notice, and prior to formally initiating a National Environmental Policy Act (NEPA) process (or processes) to develop post-2026 operations for Lake Powell and Lake Mead (among other potential actions),

Reclamation is requesting input on: a) processes that can be employed to encourage and facilitate meaningful participation of Colorado River Basin (Basin) partners, stakeholders, and the general public in the anticipated upcoming NEPA process(es); as well as b) potential substantive elements and strategies for post-2026 operations to consider in the anticipated upcoming NEPA process(es). Reclamation anticipates formally initiating the NEPA process through a Notice of Intent to Prepare an Environmental Impact Statement in the Federal Register in early 2023. As noted in more detail below, given current conditions in the Colorado River Basin, Reclamation may utilize multiple NEPA efforts, or other appropriate processes, to address emerging low-reservoir conditions in the Basin.

The Colorado River Basin provides essential water supplies to approximately 40 million people, nearly 5.5 million acres of agricultural lands, and habitat for ecological resources across the Southwestern United States and Northwestern Mexico. The limited water supplies of the Colorado River are declining and the Colorado River Basin is currently experiencing a prolonged period of drought and record-low runoff conditions resulting in historically low reservoir levels at Lake Powell and Lake Mead. The period from 2000 through 2022 is the driest 23-year period in more than a century and one of the driest periods in the last 1,200 years. Absent a change in hydrologic conditions, water use patterns, or both, Colorado River reservoirs will continue to decline to critically low elevations threatening essential water supplies across nine states in the United States and the Republic of Mexico (Mexico). It is foreseeable that without appropriate responsive actions and under a continuation of recent hydrologic trends, major Colorado River reservoirs could continue to decline to "dead pool" — elevations at which water cannot be regularly released from a reservoir — in coming years. As stated in the 2019 Lower Basin Drought Contingency Plan:

...as a result of actual operating experience subsequent to the adoption of the 2007 Interim Guidelines, as well as emerging scientific information regarding the

increasing variability and anticipated decline in Colorado River flow volumes, the Parties recognize and acknowledge that entities that rely on the Colorado River as a water source face increased individual and collective risk of temporary or prolonged interruptions in water supplies, with associated adverse impacts on the society, environment and economy of the southwestern United States.

The current unprecedented drought and low-runoff conditions are anticipated to persist and potentially worsen as a result of a number of factors, including increasing temperatures in the Basin, and other effects of climate change.

As a result of the exceptionally low runoff conditions over the past 3 years (2020, 2021, and 2022), unprecedented drought response operations have been triggered at Lake Powell and Lake Mead consistent with the 2007 Interim Guidelines and agreements adopted pursuant to the 2019 Colorado River Drought Contingency Plan Authorization Act (Pub. L. No. 116-14) (the 2019 Drought Contingency Plan (DCP) Act). The unprecedented risks facing the Colorado River Basin was the subject of a June 14, 2022 U.S. Senate hearing in which Reclamation Commissioner Camille Touton noted that while no one knows how dry the next few years could be, if recent (2018-present) dry conditions continue, Lake Powell and Lake Mead face extraordinary risks over the next 12-24 months, and that additional actions are needed to protect the reservoirs from rapidly declining to critically-low elevations: reductions totaling millions of acre-feet in reductions of use across the Basin could be needed to stabilize the reservoirs.

### Background on development of the 2007 Interim Guidelines.

Initially spurred by a 5-year period in which Lake Powell and Lake Mead lost nearly half of the combined storage in the reservoirs as a result of an ongoing multi-year drought, decreasing overall system storage, and growing demands for Colorado River water, at the direction of the Secretary of the Interior, Reclamation initiated a NEPA process in 2005 to develop operating guidelines for the coordinated operations of Lake Powell and Lake Mead, along with Lower Basin shortage criteria (and other related actions). See 70 FR 57322 (September 30, 2005). Following completion of the NEPA

process (and associated compliance activities), in December 2007 Secretary of the Interior Kempthorne approved the Record of Decision for the 2007 Interim Guidelines. Published at 73 FR 19873 (April 11, 2008). The 2007 Interim Guidelines provided objective operating criteria for the coordinated operations of Lake Powell and Lake Mead and for determining Lower Basin shortage conditions, as well as establishing a program to encourage water conservation actions in the Lower Basin.

Operational Agreements, Operating Experience and Changed Circumstances Since Adoption of the 2007 Interim Guidelines.

### Operational Agreements.

Since their adoption, the 2007 Interim Guidelines have provided operating criteria for Lake Powell and Lake Mead including provisions designed to provide a greater degree of certainty to water users about timing and volumes of potential water delivery reductions, as well as additional operating flexibility to conserve and enhance water storage in Colorado River system reservoirs. In 2012, the United States and Mexico adopted Minute 319, a binational agreement adopted pursuant to the 1944 Water Treaty. Minute 319 provided interim (2012-2017) operating provisions that implement the provisions of the 1944 Water Treaty, establishing objective criteria for treaty deliveries through a wide range of reservoir conditions, and established mechanisms that provide Mexico with the flexibility to reduce water use and defer delivery of the reduced volumes in subsequent years. Minute 319 also provided U.S. funding to enhance water conservation and riparian habitat in the Colorado River Delta and Limitrophe region.

Notwithstanding the elements of the 2007 Interim Guidelines (and Minute 319), as hydrologic conditions worsened thereby increasing the risk of reservoirs declining to critically-low conditions, in 2013-2014, Reclamation and stakeholders began pursuing additional adaptive management actions. Among other drought response activities, the Upper and Lower Basin DCPs were adopted pursuant to the 2019 DCP Act. A further

agreement with Mexico in 2017 (Minute 323) had previously established enhanced water reduction, water conservation, and savings mechanisms pursuant to the 1944 Water Treaty. Both the 2007 Interim Guidelines and the DCPs are anticipated to be in place for an interim period through 2026. Similarly, Minute 323 is anticipated to be in effect through 2026.

## 2020 Review of Operating Experience.

The interim nature of the 2007 Interim Guidelines has provided the opportunity to gain valuable experience in the management of Lake Powell and Lake Mead under the adopted operations, improving the basis for making future operational decisions, both during the interim period and after. Section XI.G.7.D. of the 2007 Interim Guidelines required the documentation of this experience and an evaluation of the effectiveness of the 2007 Interim Guidelines. In fulfillment of this provision, in December 2020, Reclamation published on its website its "Review of the Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead" (the 2020 7.D. Review).

The purpose of the 2007 Interim Guidelines was determined in the early stages of the NEPA process led by Reclamation to develop the guidelines and consists of 3 components. As stated in Section IV of the 2007 Interim Guidelines, the purpose is to:

- "improve Reclamation's management of the Colorado River by considering trade-offs between the frequency and magnitude of reductions of water deliveries, and considering the effects on water storage in Lake Powell and Lake Mead, and on water supply, power production, recreation, and other environmental resources;
  - provide mainstream United States users of Colorado River water, particularly

<sup>&</sup>lt;sup>1</sup> Except for the special provisions described in Section XI.G.8. of the 2007 Interim Guidelines, the 2007 Interim Guidelines are anticipated to remain in effect through December 31, 2025 (through preparation of the 2026 Annual Operating Plan). With the exception of certain Intentionally Created Surplus recovery and Upper Basin demand management provisions, operations under the Guidelines and the DCPs are in effect through December 31, 2026.

those in the Lower Division states, a greater degree of predictability with respect to the amount of annual water deliveries in future years, particularly under drought and low reservoir conditions; and

• provide additional mechanisms for the storage and delivery of water supplies in Lake Mead to increase the flexibility of meeting water use needs from Lake Mead, particularly under drought and low reservoir conditions."

The 2020 7.D. Review found that the 2007 Interim Guidelines were largely effective as measured against this stated purpose.

However, with respect to the 4 operational elements of the 2007 Interim Guidelines (Coordinated Operations of Lake Powell and Lake Mead, Lower Basin Surplus Guidelines, Lower Basin Shortage Guidelines, and Storage and Delivery of Conserved Water in the Lower Basin), the 2007 Interim Guidelines failed to provide sufficiently robust operating provisions to address the increasing severity of the drought and low runoff conditions exacerbated by climate change. By 2013-2014, as a result of the worsening drought, a broad consensus within the Basin emerged that additional actions were needed to reduce the risk of Lake Powell and Lake Mead reaching critically low elevations. This led to the adoption of the DCPs and other voluntary adaptive actions.

The 2020 7.D. Review also documented important considerations for enhancing future effectiveness: 1) enhanced flexibilities and transparency for water users; 2) expanded participation in conservation and Basin-wide programs; 3) increased consideration of the linkage that occurs through coordinated reservoir operations, particularly with respect to the uncertainties inherent in model projections used to set operating conditions; and 4) more robust measures to protect reservoir levels.

Reclamation received written input during the 2020 7.D. Review process from a diverse group of partners and stakeholders across the Colorado River Basin. One area of significant comment was with respect to the stakeholder engagement process used to

develop the 2007 Interim Guidelines. Multiple commenters expressed that the process was inadequate to meaningfully engage a sufficiently diverse group of stakeholders. Given the increased partner and stakeholder participation in Basin decision-making processes since the adoption of the 2007 Interim Guidelines, the Department of the Interior (Department or Interior) is particularly focused on developing and implementing a process that facilitates and encourages meaningful participation of Basin partners and stakeholders including other Federal agencies, the seven Colorado River Basin States, Native American Tribes, non-governmental organizations (NGOs), academic experts, and the general public. As discussed below, the Department is also committed to identifying processes that can complement the efforts of the International Boundary and Water Commission (IBWC) to develop post-2026 agreements that would succeed current agreements contained in Minute 323.

# Changed circumstances since adoption of the 2007 Interim Guidelines.

As Reclamation and the Department prepare to initiate a NEPA process for the post-2026 Colorado River Reservoir Operational Strategies for Lake Powell and Lake Mead under historically low reservoir conditions, it is important to succinctly highlight a few areas where circumstances have changed since adoption of the 2007 Interim Guidelines. Reclamation welcomes input on these changed circumstances as well as suggestions on potential strategies that would be appropriate to more successfully address these changed circumstances given the expectation that conditions will continue to change in the Colorado River Basin in the years and decades ahead.

1. With respect to issues involving hydrology, risk facing the Basin, and advances in scientific understandings:

Since 2000, 50 percent of these years have seen less than 11 million acre-feet (maf) of annual natural flow at Lees Ferry and 13 percent have seen less than 8 maf. The 21st century has been 20 percent drier than the 20th century, and the 5-year average has

declined by 33 percent in 23 years. Future strategies should consider these conditions and the likelihood of continued declines in supply.

The 2007 Interim Guidelines were developed in response to 5 years of drought and precipitous reservoir declines and were based primarily on the modeling assumption of a stationary climate where future inflows were adequately represented in the observed historical record.

Since 2007, unprecedented drought has changed our understanding of basin hydrology; climate science tells us that the future temperatures in the Colorado River Basin will continue to warm and that we can expect an increased likelihood of experiencing deep, prolonged droughts.

The 2020 7.D. Review found that while the 2007 Interim Guidelines were effective at meeting their overall purpose, the increasing severity of the drought demonstrated that the 2007 Interim Guidelines were insufficiently robust to protect reservoir storage, requiring the adoption of the DCPs and other responsive adaptive actions.

Nevertheless, even the additional actions adopted subsequent to the 2007 Interim Guidelines were demonstrably insufficient to address the ongoing drought and low runoff conditions. With declining reservoir conditions, Reclamation undertook emergency and other drought response actions in both 2021 and 2022 to protect infrastructure and operations at Glen Canyon Dam.

The latest global climate model-derived projections of climate change agree that temperatures will warm, but precipitation and impacts on basin hydrology continue to show a wide range of potential futures and experts cannot say with a high degree of confidence or specificity what is most likely to happen in a nonstationary climate (i.e., the question "what will future runoff be?" cannot be answered). Hydrologic uncertainty combined with uncertain future growth and water use compound to mean that it is

impossible to assign probabilities to any given future and the basin is experiencing conditions of deep uncertainty.

These factors lead Reclamation to observe that in developing post-2026 guidelines in a nonstationary, drying system, a different approach toward addressing risk that employs planning methods that account for deep uncertainty must be taken. Such an approach should enhance the ability to identify robust policies that are better prepared to adapt to changing conditions.

For planning purposes, robust policies are those that withstand a broad range of future conditions and are not based on a single set of assumptions about water supply and demand. With increasing temperatures across the basin, predictions of commensurate decreases in reliable supply, and uncertainty in future demands, Reclamation believes that future policies must be tested across a wide range of potential future conditions, including drought sequences that are longer and more severe than those that have been observed. Absent such an approach, policies are likely to be insufficiently robust, adaptable, and successful.

2. With respect to issues regarding engagement and inclusivity in Colorado River decision-making:

The domestic stakeholder process used to develop the 2007 Interim Guidelines was considered, at the time, to have engaged a wide range of stakeholders and included extensive public involvement. Central to this process was technical outreach and modeling support provided by Reclamation.

In the intervening 15 years, there has been an increasing level of collaboration and communication across the Basin — indicating the necessity of more deeply engaging a broader range of stakeholders during the upcoming process(es). Meaningfully engaging and encouraging the participation of Colorado River Basin Tribes, representatives of Mexico, and NGOs was crucial to the success of the key and essential operational

decisions that have come about since the adoption of the 2007 Interim Guidelines.

As we approach the initiation of efforts to develop post-2026 guidelines,

Reclamation has identified that it intends to design and implement a stakeholder process
that is inclusive, transparent, and encourages meaningful engagement. In order to
accomplish this commitment, Reclamation intends to prioritize stakeholder technical
education, technical outreach, and timely access to relevant technical information.

Reclamation intends to support parties in developing strategies and would welcome input
on recommended steps to ensure active participation by a wide range of Basin partners,
stakeholders, and the general public. Reclamation will continue to seek to prioritize the
development of approaches that have broad-based support.

#### a. With respect to Colorado River Basin Tribes:

During the preparation of the 2007 Interim Guidelines, the Department conducted extensive engagement with Native American Tribes in the Colorado River Basin (Basin Tribes) regarding the potential adoption of operating guidelines for Lake Powell and Lake Mead and related actions, including the adoption of rules regarding creation, accounting and delivery of Intentionally Created Surplus. See 2007 Final Environmental Impact Statement (FEIS), Appendix I, at

https://www.usbr.gov/lc/region/programs/strategies/FEIS/AppI.pdf.

Notwithstanding the engagement documented in the 2007 FEIS, during the implementation of the 2007 Interim Guidelines, many Basin Tribes have expressed deeply-held concerns, viewpoints, and objections to the lack of full engagement and consultation, and that any engagement during the development (and implementation) of the 2007 Interim Guidelines was insufficient to address the range of interests, needs, and fundamental rights of the Basin Tribes. These concerns have significantly increased as water supply conditions in the Basin have been increasingly impacted by drought, low runoff, and the effects of climate change.

Interior has undertaken extensive efforts across the Basin to facilitate Indian

Water Rights Settlements, enhance Tribal utilization of water rights, engage with Tribal

Governments, and facilitate Basin engagement. For example, beginning last year,

Reclamation has hosted monthly Tribal Information Exchanges as one mechanism to

share timely information on Colorado River Basin conditions, challenges, and

opportunities for investment and water conservation programs. While these efforts have

continuously increased over time, there are extraordinary and unique challenges facing

Basin Tribes.

Basin Tribes have expressed their concerns in direct correspondence to the Secretary of the Interior and have formally requested commitments from Interior for greater inclusion in the NEPA process to develop post-2026 operations, as well as increased engagement and consultation during the implementation of any guidelines developed pursuant to the upcoming NEPA process.

Interior recognizes that each Basin Tribe possesses unique rights (including water rights), unique viewpoints, and concerns with respect to current and projected conditions in the Basin. While it is premature at this time for Interior to make precise decisions about the content of post-2026 operations, the Secretary of the Interior has and is committed to engage and consult with the Basin Tribes in a meaningful and transparent manner during the upcoming NEPA process and to fully consider tribal input and viewpoints through government-to-government consultation, consistent with the Department's Detailed Plan for Improving Interior's Implementation of Executive Order 13175, Consultation and Coordination with Indian Tribes, found at www.doi.gov/priorities/tribal-consultation. Interior is interested in receiving specific input on the most effective processes that can be employed during the upcoming NEPA process(es) to ensure that these commitments are fully implemented.

b. With respect to engagement with Mexico:

The 2007 Interim Guidelines were adopted under the authority of the Secretary of the Interior. Accordingly, the scope of the 2007 Interim Guidelines was domestic, and no decisions were made regarding operations under the 1944 Water Treaty.

Since 2007 an extraordinary cooperative process has been forged between the two nations with the participation of the Department and Reclamation in support of agreements developed between the United States and Mexico Sections of the IBWC. Since adoption of the 2007 Interim Guidelines, significant international agreements on the Colorado River are memorialized in Minutes 316, 317, 318, 319, and 323.

With Minute 323 scheduled to expire at the same time as the 2007 Interim Guidelines and the 2019 DCP, the United States and Mexico have expressed a policy goal of developing a successor to Minute 323 on a parallel timeline as the domestic development of post-2026 operational approaches. This policy goal is intended to ensure that Colorado River reservoirs continue to be managed in a manner that ensures an appropriate degree of operational alignment.

While not determining in any way what processes the IBWC may choose to utilize, the Department would welcome input on how the Interior-led domestic planning processes could be implemented in a coordinated and complementary fashion to those of the IBWC.

3. With respect to the current and emerging operational challenges and potential for significant disruptions to Colorado River water supplies under continued low-runoff conditions:

While previous actions, especially the DCP, were intended to preserve Reclamation's ability to undertake post-2026 planning with a stable system and avoid crisis planning, very dry hydrology since the adoption of the DCP has resulted in Lake Powell and Lake Mead nearing critically low elevations.

Should the conditions continue or worsen, we recognize that in addition to post-

2026 planning under the anticipated NEPA process(es), Reclamation may likely need to also prioritize implementation of near-term actions to stabilize the decline in reservoir storage and prevent system collapse. Reclamation has not yet determined what additional actions or processes may be required to address these near-term operational risks. It is anticipated that near-term response actions and development of post-2026 operations will need to proceed on parallel timelines.

- *Process:* Reclamation seeks specific input on suggested mechanisms for the anticipated NEPA process(es) to ensure that a wide range of Basin partners, stakeholders, and the general public can meaningfully engage and participate in the development of post-2026 operational strategies.
- Substantive elements of post-2026 operations: Reclamation seeks input on potential substantive elements and strategies that should be considered for post-2026 operations and considered in the anticipated upcoming NEPA process(es).

With respect to both these areas where Reclamation is seeking input through this Federal Register notice, Reclamation is particularly interested in receiving specific recommendations that can be considered and potentially integrated as the initiation of the NEPA process is being developed.

Reclamation notes that it intends to formally initiate the NEPA process for development of post-2026 operations through a Notice of Intent to Prepare an Environmental Impact Statement in the Federal Register in early 2023. Any input received as part of this Federal Register notice request for input will be fully considered by Reclamation but formal scoping comments will be solicited following initiation of the anticipated NEPA process. Decisions by entities whether or not to submit input regarding this Federal Register notice shall not limit or prejudice in any manner comments such entities may choose to submit during the formal scoping period following a formal Notice of Intent to initiate preparation of an Environmental Impact Statement (anticipated in

early 2023).

Public Disclosure of Comments.

Before including your address, phone number, email address, or other personal

identifying information in your comment, you should be aware that your entire

comment—including your personal identifying information—may be made publicly

available at any time. While you can ask us in your comment to withhold your personal

identifying information from public review, we cannot guarantee that we will be able to

do so.

Tanya Trujillo,

Assistant Secretary for Water and Science.

[FR Doc. 2022-13502 Filed: 6/23/2022 8:45 am; Publication Date: 6/24/2022]